Notice of Allowability	Application No.	Applicant(s)	
	10/808,490	KREIS ET AL.	
	Examiner	Art Unit	
	Christopher Verdier	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Applicant's Amendment dated 8-9-06 and the Supplemental Declaration dated 10-5-06*.

2. ☒ The allowed claim(s) is/are *1-4 and 7-18*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Adam Cermak, Attorney of Record, on October 10, 2006.

The application has been amended as follows:

In the Specification:

The new paragraph most recently inserted at page 10, between lines 9 and 10 is amended as follows:

-- Fig. 1a shows an extract of an axial turbomachine in which at least one rotor blade row 11 and at least one guide vane row 12 is provided. Both rows 11, 12 are separated axially from each other along an axis A of the axial turbomachine. The turbomachine provides rotor blades 13 and guide vanes 14 arranged in at least one of the rotor blade rows 11 and guide vane rows 12 and have respective blade roots 2, 3 or vane roots ~~3~~2', 3' which protrude into fastening contours 10,10' within the rotor arrangement 1 and stator housing arrangement 1'. A sealing element 4 of plastically deformable material is provided between a blade root 2, 3 or vane root ~~3~~2', 3' or guide

vane row and rotary flow machine component 15, like an intermediate piece or a heat insulation segment, directly adjoining the blade root ~~2~~ or vane root ~~3~~. --

All of the replacement paragraphs appearing on page 13 are amended as follows:

-- List of designations

1	Rotor arrangement
1'	Stator housing arrangement
2, 2', 3, 3'	Blade/vane root
21, 21', 31, 31'	Platform
22, 32	Side flanks
4	Plastically deformable material, sealing element
41	Squeeze region
42	Wedge end
5	Sealing gap (cold gap)
6	Sealing gap (hot gap)
7, 8	Platform
71, 81	Side flanks of platform 7,8
72, 82	Cooling ducts
73, 83	Side flanks
74	Sealing protrusion
9	Hot gas duct
10, 10'	Fastening contour
11	Rotor blade row
12	Guide vane row
13	Blade
14	Guide vanes

15 Machine component
C Connection --

In the Claims:

Claim 1 is amended as follows:

-- 1. (Currently Amended) A seal arrangement for reducing the seal gaps within a rotary flow machine, the seal arrangement comprising:

rotor blades and guide vanes arranged in at least one rotor blade row and at least one guide vane row, respectively, each rotor blade and guide vane having blade roots and vane roots which are fastened to the rotor blade rows and guide vane rows, respectively;

the blade roots and vane roots each having a respective platform;

a sealing element comprising a plastically deformable material positioned

(a) between at least two platforms of adjacent blade roots and vane roots along a rotor blade row, or

(b) between at least two platforms of adjacent blade roots and vane roots along a guide vane row, or

(c) between a platform of either a blade root or ~~of~~ a vane root and a rotary flow machine component when directly adjoining the platform;

the sealing element being firmly connected to at least one platform and having a thickness protruding from the surface of the at least one platform;

said at least two adjacent platforms or said platform and said component when directly adjoining the platform enclose a cold gap s_c in a cold condition and a hot gap s_w in a hot condition during operation of the rotary flow machine;

wherein the plastically deformable material comprises a sintered metal comprising a homogeneously baked combination from NiAl, FeAl, or CoAl. --

In claim 2, line 1, "1" has been changed to -- 9 --.

In claim 3, line 1, "1" has been changed to -- 9 --.

In claim 7, line 1, "1" has been changed to -- 18 --.

In claim 8, line 1, "1" has been changed to -- 18 --.

Claim 9 is amended as follows:

-- 9. (Currently Amended) A seal arrangement for reducing the seal gaps within a rotary flow machine, the seal arrangement comprising:

rotor blades and guide vanes arranged in at least one rotor blade row and at least one guide vane row, respectively, each rotor blade and guide vane having blade roots and vane roots which are fastened to the rotor blade rows and guide vane rows, respectively;

the blade roots and vane roots each having a respective platform;

a sealing element comprising a plastically deformable material positioned

(a) between at least two platforms of adjacent blade roots and vane roots along a rotor blade row, or

(b) between at least two platforms of adjacent blade roots and vane roots along a guide vane row, or

(c) between a platform of either a blade root or ~~of~~ a vane root and a rotary flow machine component when directly adjoining the platform;

the sealing element being firmly connected to at least one platform and having a thickness protruding from the surface of the at least one platform;

said at least two adjacent platforms or said platform and said component when directly adjoining the platform enclose a cold gap s_c in a cold condition and a hot gap s_w in a hot condition during operation of the rotary flow machine; and

wherein

$$s_w << s_c. \text{ --}$$

New claim 18 is added as follows:

-- 18. (New) The seal arrangement as claimed in claim 9, wherein the plastically deformable material comprises a sintered metal, a metal foam, or a porous metallic coating. --

The above changes to the specification have been made to insert reference numerals thereinto that are shown in the Replacement Sheets of Drawings filed August 9, 2006. The above changes to claims 1 and 9 have been made in order to better and more clearly recite the claim language relating to the various Markush/species recited in these claims. Claims 2 and 3 have been amended to depend from claim 9, because the features of claims 2 and 3 are different species which are excluded by the sintered metal comprising a homogeneously baked combination from NiAl, FeAl, or CoAl recited in claim 1. New claim 18 has been added which pertains to the plastically deformable material generically comprising sintered metal, a metal foam, or a porous metallic coating, which depends from generic claim 9, with claims 7 and 8 amended to depend on new claim 18, because the features of claims 7 and 8 are different species

which are excluded by the sintered metal comprising a homogeneously baked combination from NiAl, FeAl, or CoAl recited in claim 1.

The IPER from PCT/IB02/03862 (which was crossed out in the IDS of September 14, 2004) has been listed by the examiner on form PTO-892, because both the statement of relevance and the fee for consideration thereof have been provided.

Examiner's Comment

Applicant's amendments to page 10, lines 12-15 of the specification overcome the objection to this portion of the specification as being unclear. The designation of this application as a continuation-in-part of International Application PCT/IB02/03862 overcomes the objection under 35 USC 132(a) to the amendment filed November 11, 2005 as introducing new matter, as well as the rejection of claim 7 under 35 USC 112, first paragraph as failing to provide with the written description requirement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C.V.
October 10, 2006

Christopher Verdier
Primary Examiner
Art Unit 3745